

R E M A R K S

The specification and claims have been amended to correct minor informalities of which the undersigned has become aware.

Submitted herewith are marked copies of the changed pages to show that no new matter has been added.

It is respectfully requested that the amendments to the specification and claims be approved and entered.

And it is respectfully submitted that the amendments to the claims are not related to patentability and do not narrow the scope of the claims either literally or under the doctrine of equivalents.

In view of the foregoing, it is respectfully requested that prosecution on the merits proceed in light of this Preliminary Amendment.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,



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DISPLAY SYSTEM AND MICRODISPLAY APPARATUS

the
This application claims *the* benefit of Japanese Application No. 2000-227507 filed in Japan on July 27, 2000, Japanese Application No. 2000-227506 filed in Japan on July 27, 2000, *and* Japanese Application No. 2000-340804 filed in Japan on November 8, 2000, *and includes the subject matter of* Japanese Application No. 2000-184302 filed in Japan on June 20, 2000, *all of* the contents of *which are* incorporated *herein* by ~~this~~ reference.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a display system and a microdisplay apparatus, and more particularly, to a display system and a microdisplay apparatus suitable for data communication via a display interface capable of plug and play.

2. Description of the Related Art

There is an interface conformed with DDC1/DDC2B/DDC2AB standard which is prescribed by VESA (Video Electronics Standards Association) as means for communication between a personal computer and a display apparatus. Further, there is EDID (Extended Display Identification Data Standard) as a data format on which specific information of the display apparatus is recognized by the personal computer by using

communication with said host apparatus.

4. A system according to Claim 1, wherein said display apparatus [further] comprises an alarm indicator lamp for alarm display.

5. A display system comprising:

a host apparatus having an image output interface;

a display apparatus which is operated by supply of at least one of a video signal and power from said host apparatus; and

a communication [function] ^{interface} /for [receiving and transmitting] ^{communicating} data between said host apparatus and said display apparatus,

wherein said display apparatus comprises a storing unit for storing power consumption data [thereof] and display-side communication means for transmitting said power consumption data stored in said storing unit, and

^{wherein} /said host apparatus comprises host-side communication means for receiving said power consumption data transmitted from said display apparatus and power control means for entirely performing power control of said display system based on said power consumption data received from said host-side communication means.

6. A system according to Claim 5, wherein ^{IP} /said display

apparatus further comprises storing means for storing on-screen display information, and said display-side communication means transmits said on-screen display information, and

in said host apparatus, said host-side communication means receives said on-screen display information, and ^{said host apparatus} further comprises information superimposing means for superimposing said received on-screen display information [to] on the video signal.

7. A display system comprising:

a host apparatus having an image output interface;

a display apparatus which is operated by receiving at least a video signal from said host apparatus; and ^{communicating} a communication [function] ^{interface} for [receiving and transmitting] data between said host apparatus and said display apparatus, and

wherein said display apparatus comprises storing means for storing on-screen display information, and display-side communication means for transmitting [data which is stored in said storing means] ^{the on-screen display information}

said host apparatus comprises host-side communication means for receiving the on-screen display information transmitted by said display apparatus, and information superimposing means for superimposing the on-screen display

↑
received

information [received from said host-side communication means
[to] ^{on} the video signal, and

in said display system, said host-side communication
means transmits the video signal superimposed [to] ^{on} the on-
screen display information, [and] said display-side
communication means receives the transmitted signal, [thus,] ^{and}
said display apparatus displays an image of said on-screen
display information.

8. A system according to Claim 5, wherein said [display
apparatus has an] ^{communication} interface ^{has a} specification for communication
between said host-side communication means and said display-
side communication means which conforms with a
DDC1/DDC2B/DDC2AB standard prescribed by Video Electronics
Standards Association or an expansion function thereof.

9. A system according to Claim 7, wherein said [display
apparatus has an] ^{communication} interface ^{has a} specification for communication
between said host-side communication means and said display-
side communication means which conforms with a
DDC1/DDC2B/DDC2AB standard prescribed by Video Electronics
Standards Association or an expansion function thereof.

10. A system according to Claim 5, wherein said
display apparatus includes a mode for operating only said

[function] ^{communication interface} for communication with said host apparatus.

11. A system according to Claim 7, wherein said display apparatus includes a mode for operating only said [function] ^{communication interface} for communication with said host apparatus.

12. A system according to Claim 5, wherein said display apparatus further comprises an indicator lamp for alarm display.

13. A system according to Claim 7, wherein said display apparatus further comprises an indicator lamp for alarm display.

14. A system according to Claim 6, wherein said host apparatus further comprises first storing means for storing [the] on-screen display information thereof, and second storing means for storing the on-screen display information of said display apparatus which is received via said host-side communication means, and

said information superimposing means converts the on-screen display information stored in at least one of said first storing means and said second storing means into indicatable bit map information, and superimposes [it to] the video signal.

the indicatable
bit map information on

15. A system according to Claim 7, wherein ^P said host apparatus further comprises first storing means for storing [the] on-screen display information thereof, and second storing means for storing the on-screen display information of said display apparatus which is received via said host-side communication means, and

said information superimposing means converts the on-screen display information stored in at least one of said first storing means and said second storing means into indicatable bit map information, and superimposes [it to] the video signal.

*the indicatable
bit map information on*

16. A system according to Claim 6, wherein said on-screen display information [is] ^{comprises} ASCII text data.

17. A system according to Claim 7, wherein said on-screen display information [is] ^{comprises} ASCII text data.

18. A system according to Claim 6, wherein said display apparatus [can] ^{is adapted to} be selectively connected to a plurality of types of host apparatuses.

19. A system according to Claim 7, wherein said display apparatus [can] ^{is adapted to} be selectively connected to a

plurality of types of host apparatuses.

20. A system according to Claim 6, wherein said host apparatus ^{is adapted to} ~~can~~ be selectively connected to a plurality of types of display apparatuses.

21. A system according to Claim 7, wherein said host apparatus ^{is adapted to} ~~can~~ be selectively connected to a plurality of types of display apparatuses.

22. A ^{said microdisplay apparatus} ~~microdisplay apparatus~~ ^{adapted to be} connected to a host apparatus, comprising:

memory means for storing monitor request voltage information and monitor current consumption information as specific EDID information on said microdisplay apparatus; and

^{and transmitting communicating} communication interface means for ~~communication~~ with said host apparatus, ^{so as to transmit} ~~so as to transmit~~ said monitor request voltage information and said monitor current consumption information to said host apparatus.

23. A display system ^{comprising} ~~having~~ a host apparatus and ^{wherein:} ~~a~~ the microdisplay apparatus according to Claim 22, ^{is} ~~said host~~ apparatus ~~being~~ ^{is} connected to said microdisplay apparatus via a digital interface, ^P ~~wherein~~ said microdisplay apparatus